

NOVA

INSTALLATION MANUAL

EN



Ground Mounting System

NOVA ZnAlMg GROUND MOUNT



25 YEAR
WARRANTY



UP-TO 30% FASTER
INSTALLATION



PORTRAIT



TILT ANGLE
From 5°-60°

REGINA WAUTERSWEG 13, 8800 ROESELARE
BELGIUM

+32 (0)51 14 05 94

WWW.NOVAMOUNTING.COM

INTRODUCTION

Welcome to the NOVA Solar Mounting Solution Installation Manual. This guide is your comprehensive resource for installing NOVA's solar mounting systems. Designed with precision and engineered for durability, our systems ensure a seamless and efficient installation experience.

Whether you're working with penetrative tin roofs, tile roofs, or other specialised surfaces, this manual provides step-by-step instructions and all the necessary details to ensure a successful and long-lasting solar installation.

GENERAL RESPONSIBILITY & SAFETY GUIDELINE

Qualified Installers: Only qualified and trained personnel should install and operate the equipment. At least two people must be present during installation to ensure safety and provide assistance in case of an emergency.

Handling and Modification: Do not throw or roughly handle any components. Avoid bringing the system into contact with sharp or heavy objects. Do not modify components in any way, including exchanging bolts, drilling holes, or bending parts. Any such modifications not described in the standard installation procedure will void the warranty.

Compliance: Ensure compliance with national and local building regulations, health and safety standards, and environmental requirements.

Roof Inspection: Before installation, verify the roof's load-bearing capacity. Check that the roof is in good condition and can support the weight of the solar panels, including additional materials and loads.

Weather Conditions: Avoid installation in adverse weather conditions, such as strong winds or wet, slippery surfaces.

Safety Measures: Follow all fire regulations related to photovoltaic installations. Ensure the roof surface is clean, dry, and free of debris before beginning installation. Use safety nets and edge protection as necessary.

Earthing and Bonding: Perform equipotential bonding, grounding, and earthing according to country-specific standards and regulations.

Protective Gear: Wear appropriate protective equipment such as helmets, gloves, and non-slip safety boots.



TESTING & CERTIFICATION

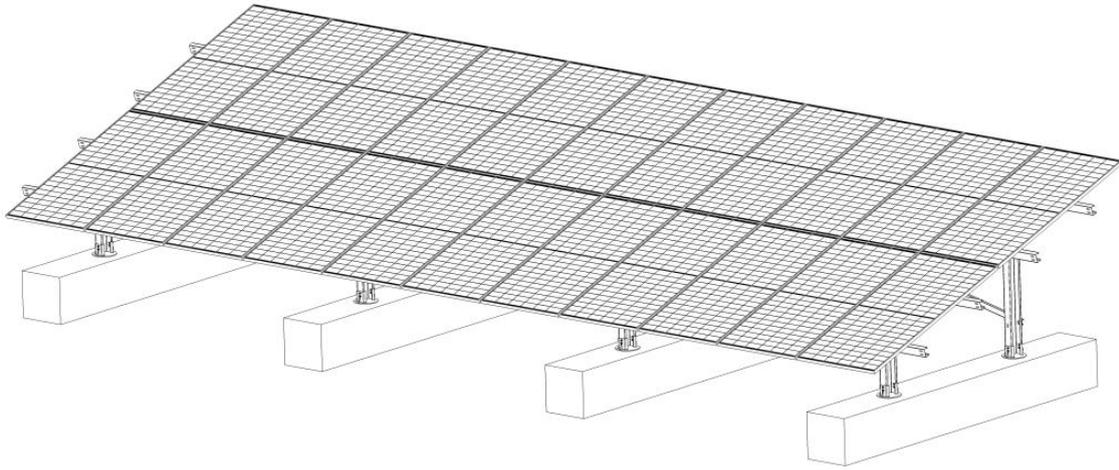
All components have been tested and developed to be compliant with relevant guides and regulations.

INSTALLATION GUIDELINES

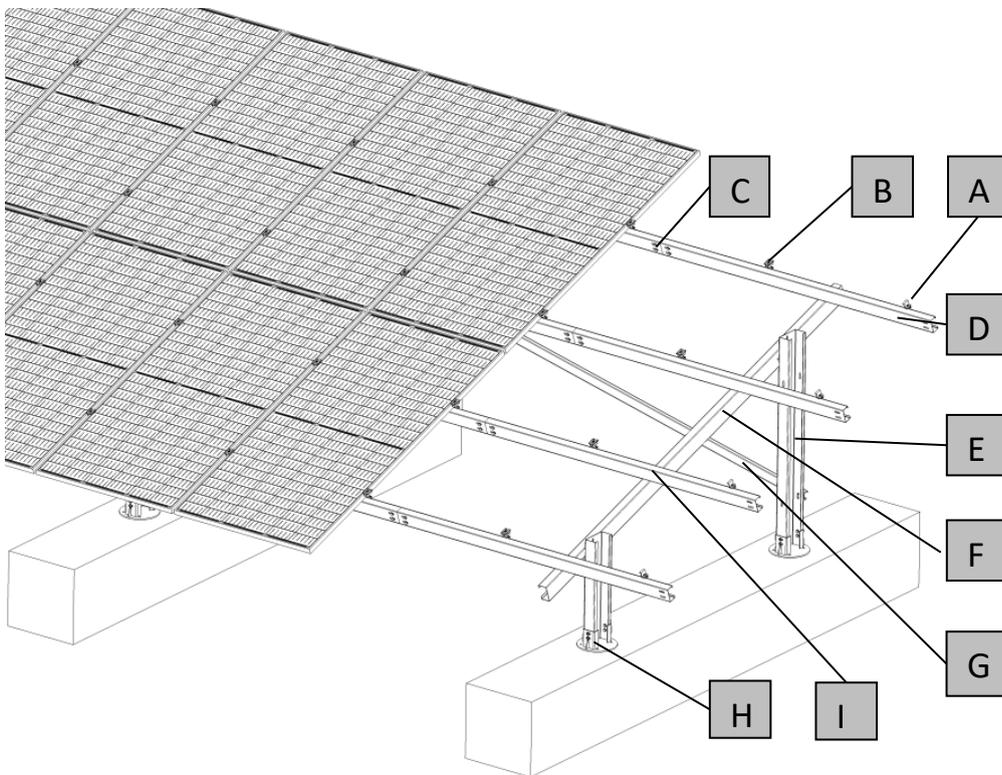
Ensure that the roof construction is suitable for the introduction of forces at the fixing points and their subsequent transmission. In order to compensate thermal expansion, include a break every 25 meters when planning the PV-system. For module positioning/fastening points please refer to manufacturers recommendations. Please follow your local timber construction standard. Please do not use installed roof connections as ladder. If installation is located within 10km from the coast, we advice not to use zinc coated material. For further information please contact your sales representative or the technical department at NOVA Mounting.

WARRANTY

Warranty according to the terms and conditions found on the website www.novamounting.com
NOVA is not accountable for the roof's capability to maintain the introduced forces. Please check the roof's compatibility with a static engineer.



ZAM Ground Mounting System



Item No.	Item	Item No.	Item
A	C Shaped Rail End Panel Clamp	F	C Shaped Rafter
B	C Shaped Rail Inner Panel Clamp	G	C Shaped Back Inclined Support
C	C Shaped Rail connector	H	Base Connector
D	C Shaped Rail	I	C Shaped Rail Clamp
E	C Shaped Support		



M8



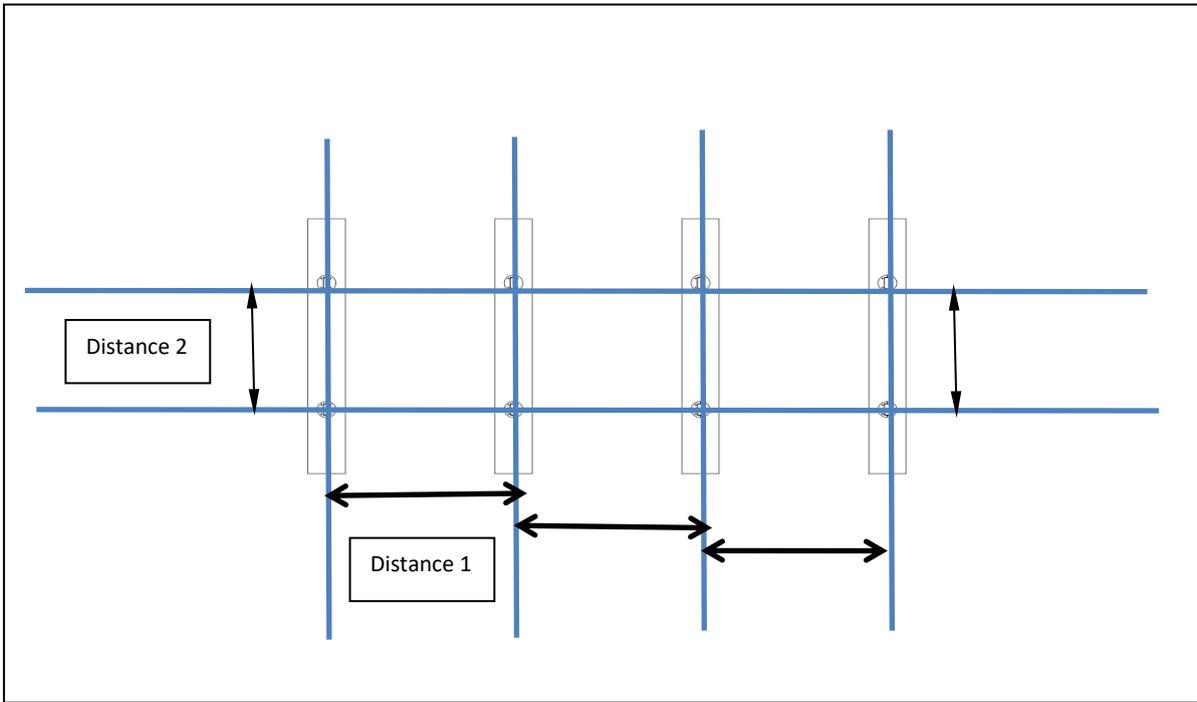
12



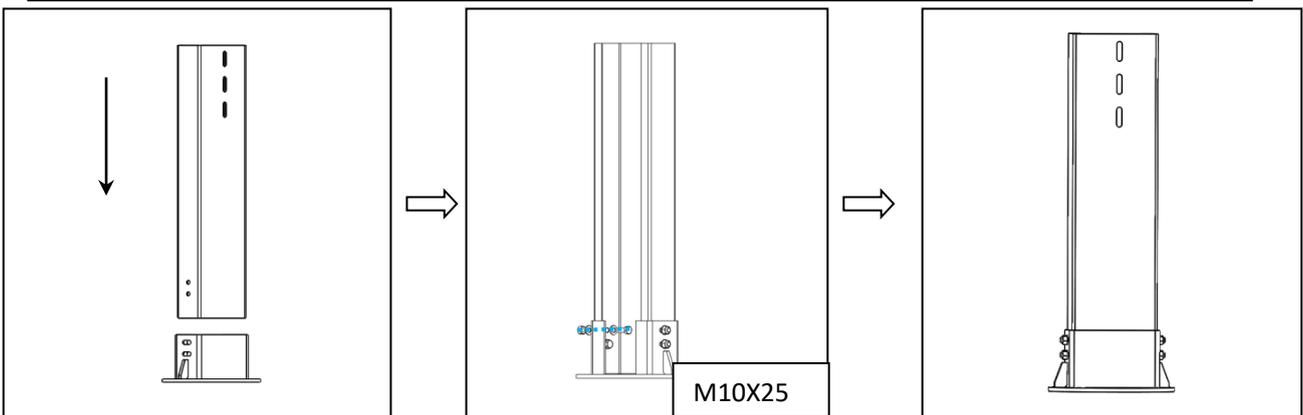
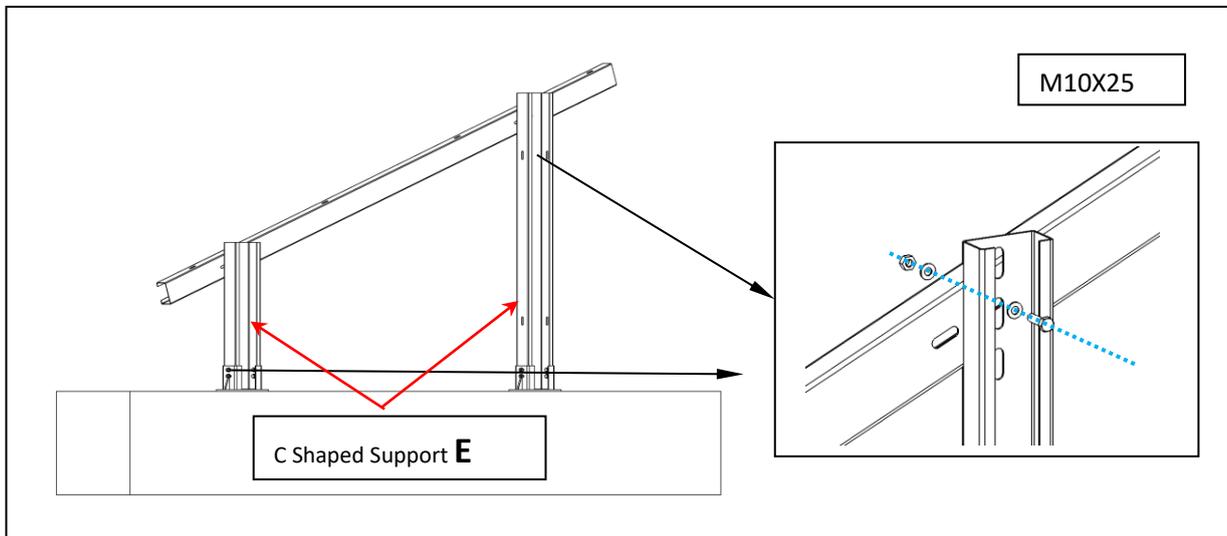
Installation Steps

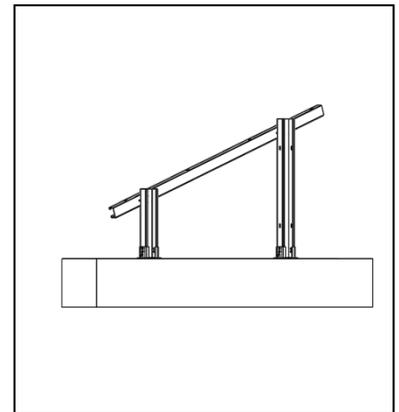
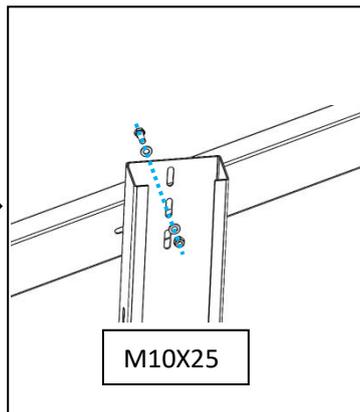
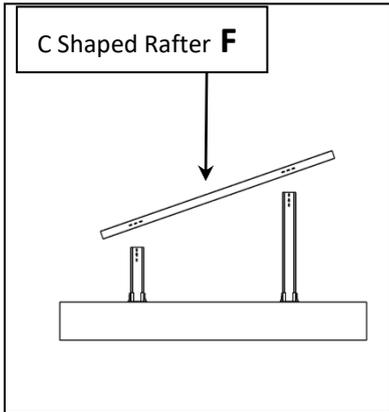
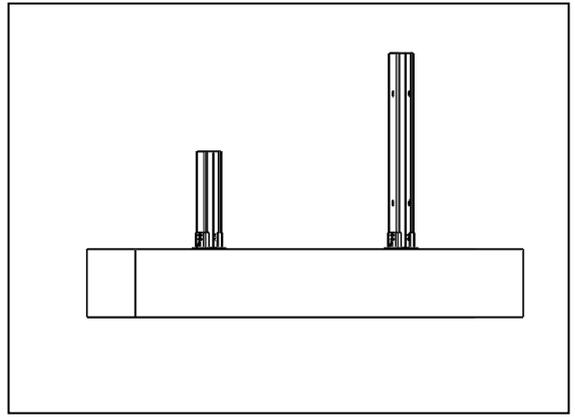
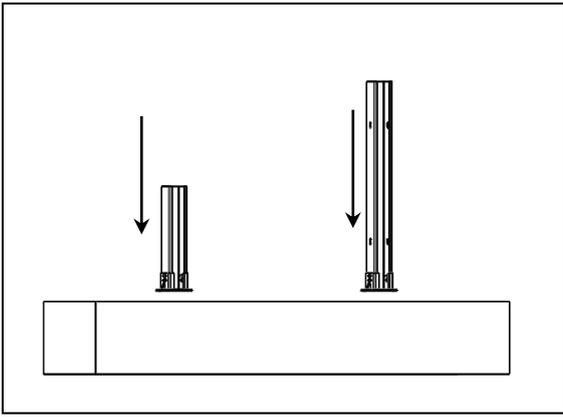
STEP.1 Install foundation and Base Connector H

Mark the location of each concrete foundation with a spirit level, string, or other relevant tools, according to Distance 1 and Distance 2 in the drawing. The concrete foundation of the same row must be kept at the same height and kept in the same straight line, and the spacing and span shall be subject to the technical drawings.

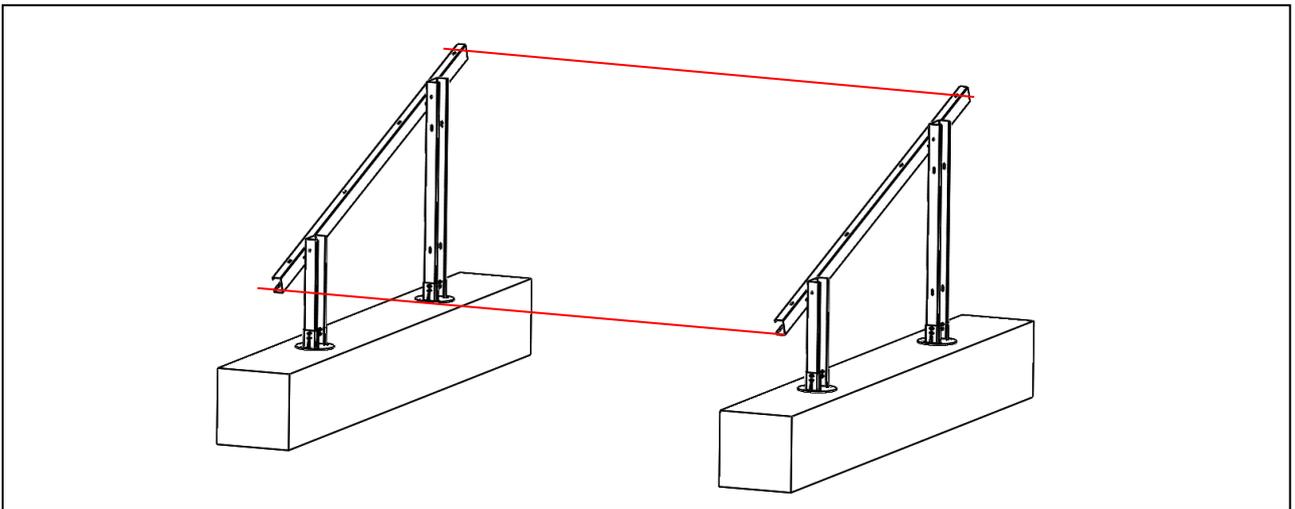


Step.2 Install Support E (Recommended torque value: M10: 25-28N.m)

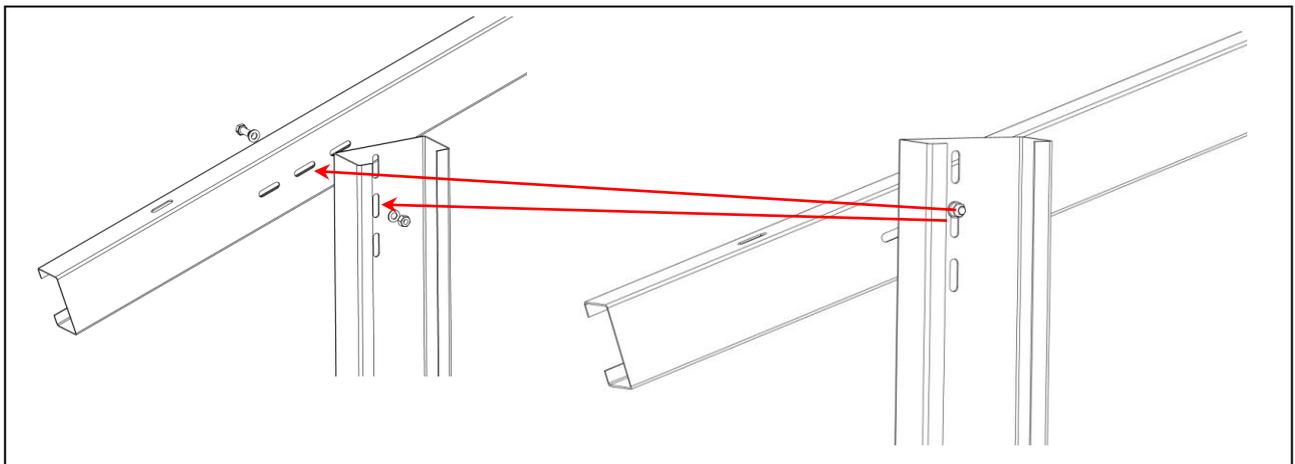




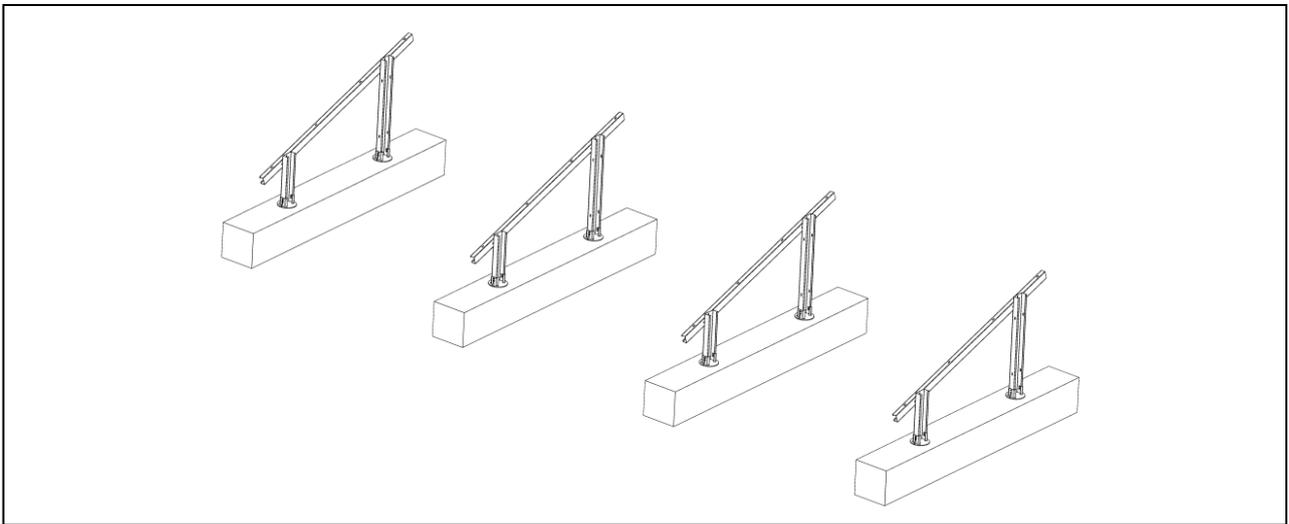
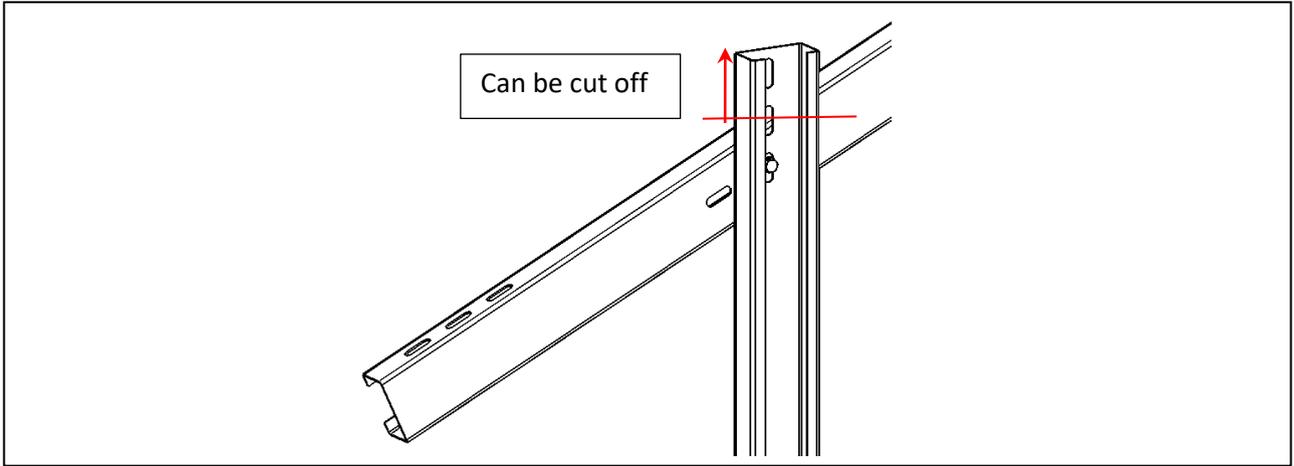
Note: Install the first and last support first, take a horizontal measurement at each of the four corners. Install the middle supports based on the horizontal lines to ensure they are in same in the same straight line.



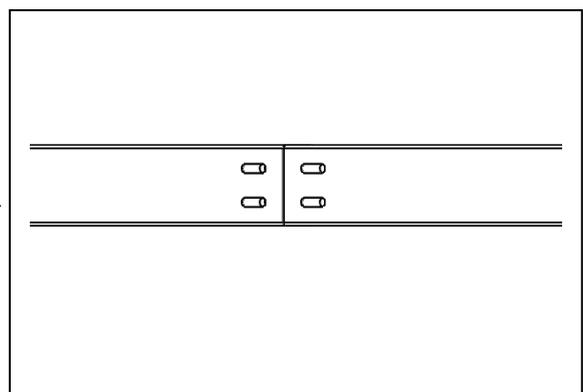
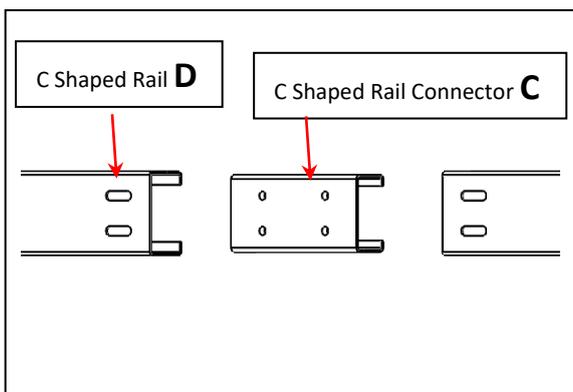
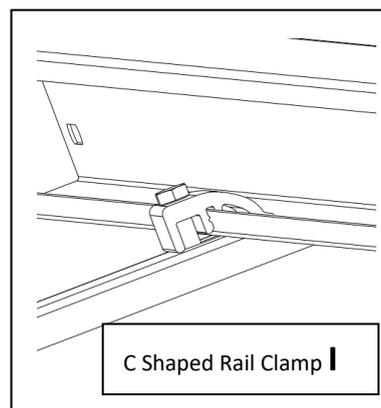
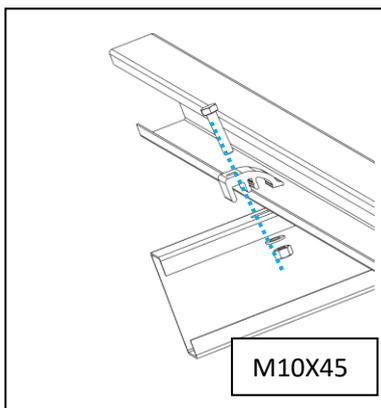
Defaulted to install the middle hole while installing the rafter and support, adjust the hole installation between the rafter and support as per actual situation(see below)

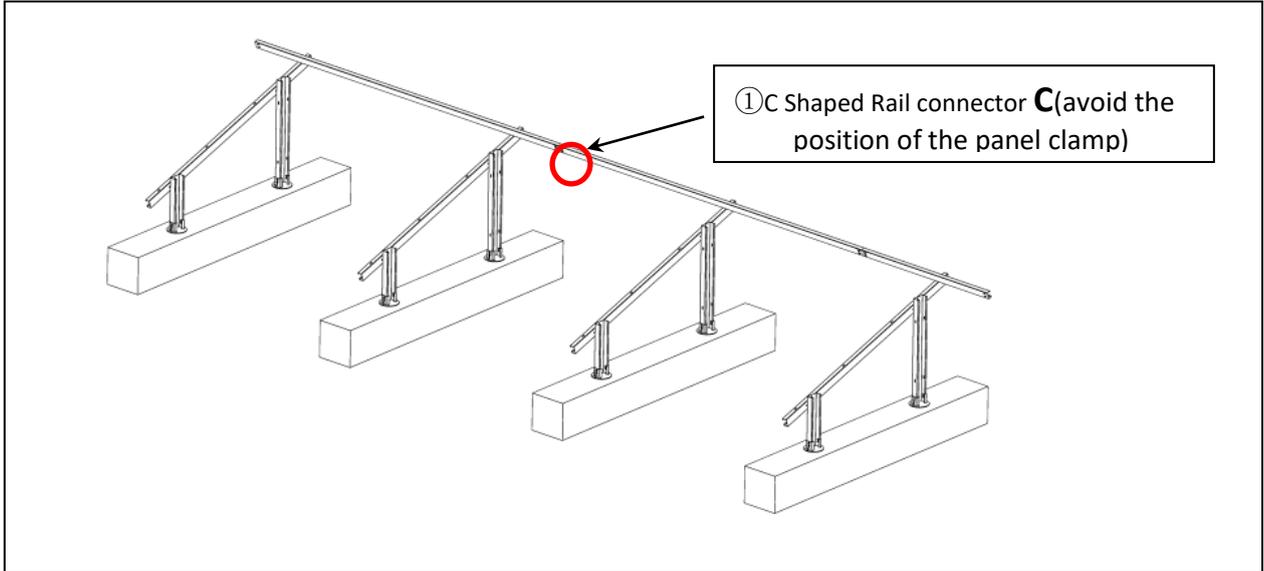
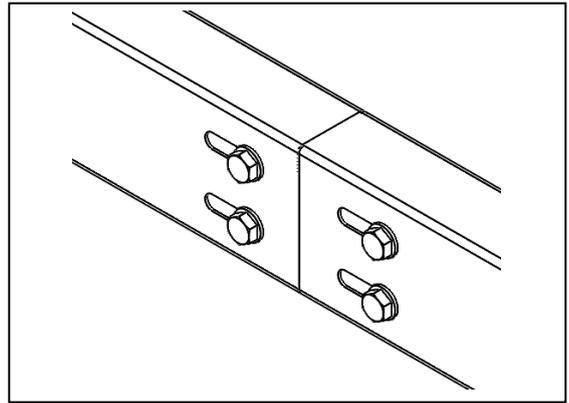
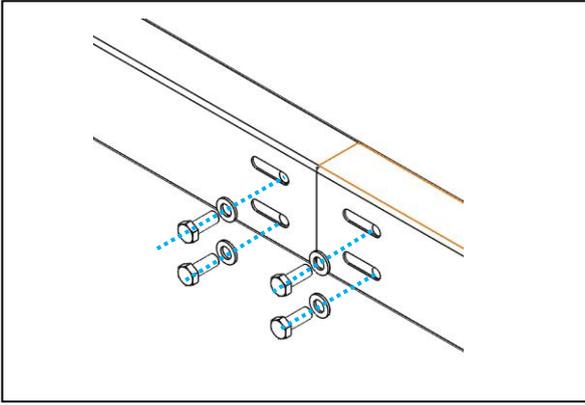


During the installation, if the support is higher than the rafter, the higher part of the support can be cut off according to the actual installation to prevent the support against the panels.

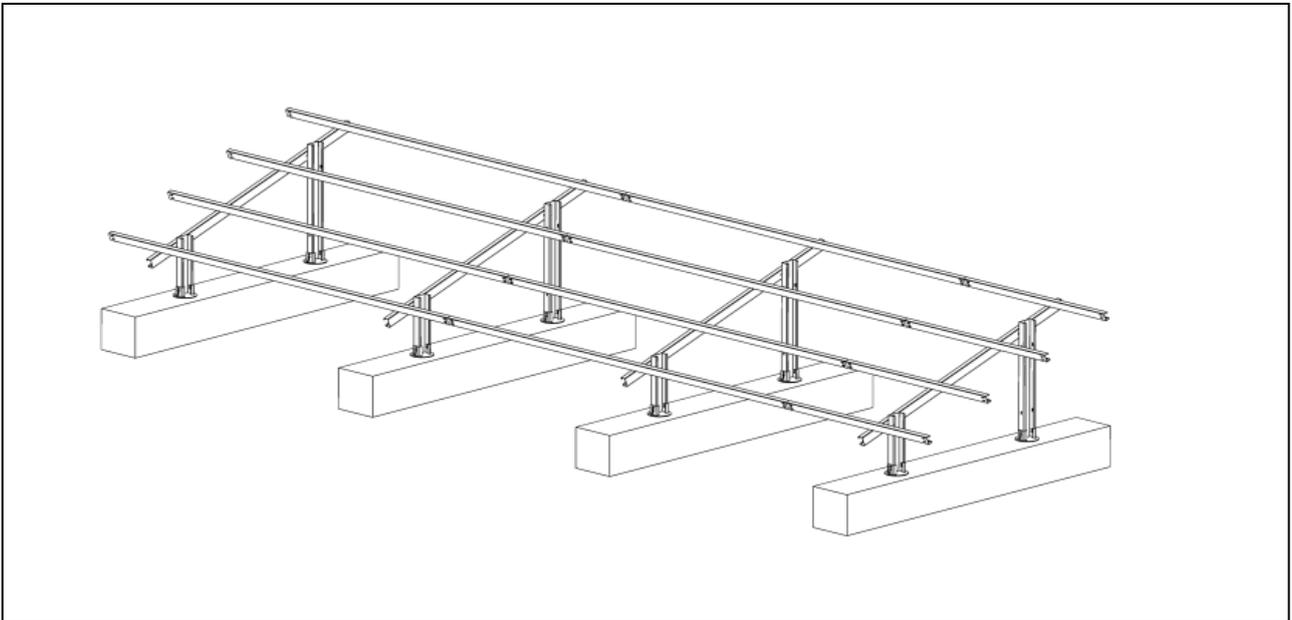


Step. 3 Install Rail Clamp I, Rail D and Rail Connector C (Recommended torque value: M10: 25-28N.m)



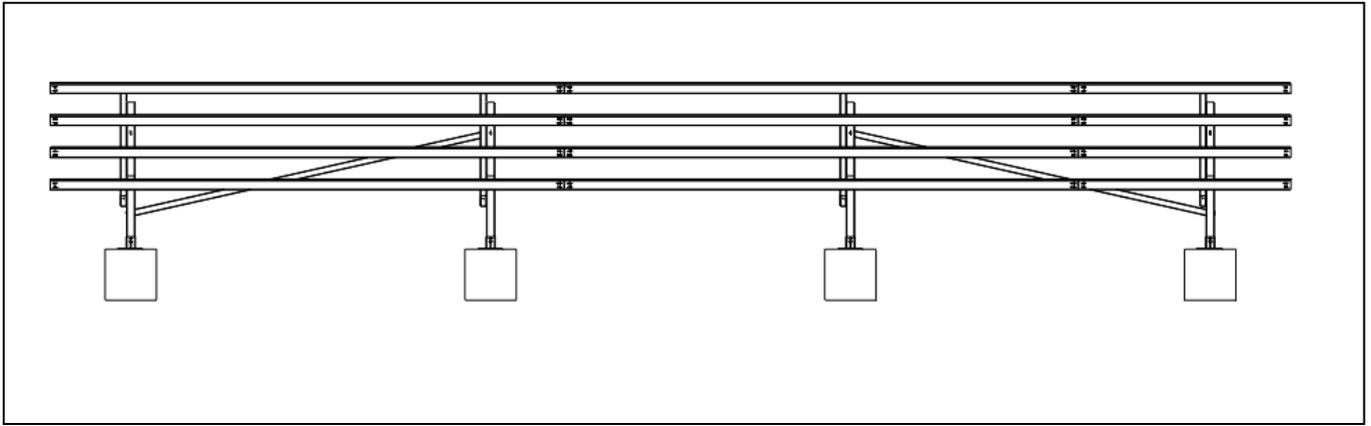
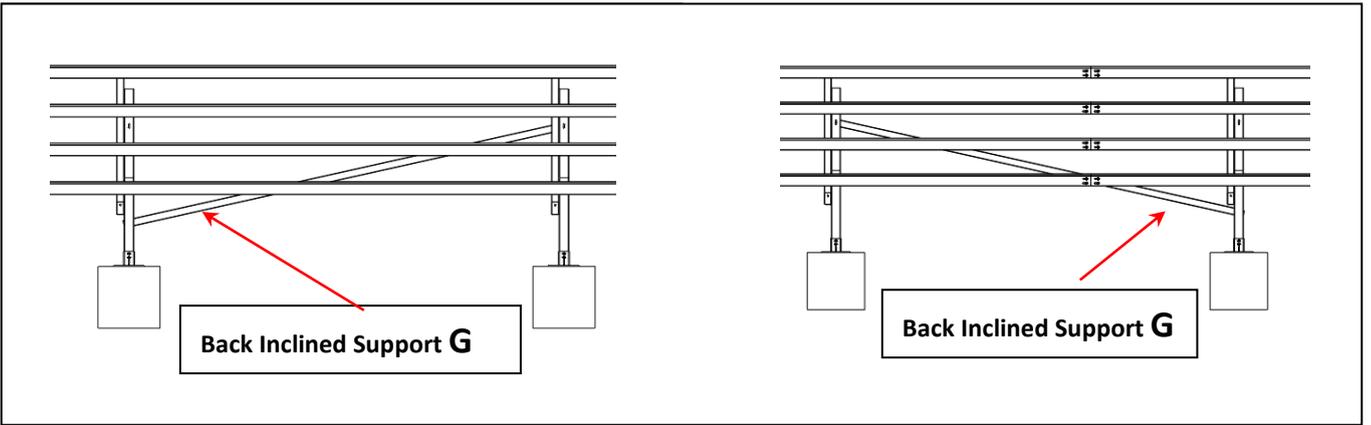


Repeat the above work until all cross beam installations are completed, ensure cross beams alignment.

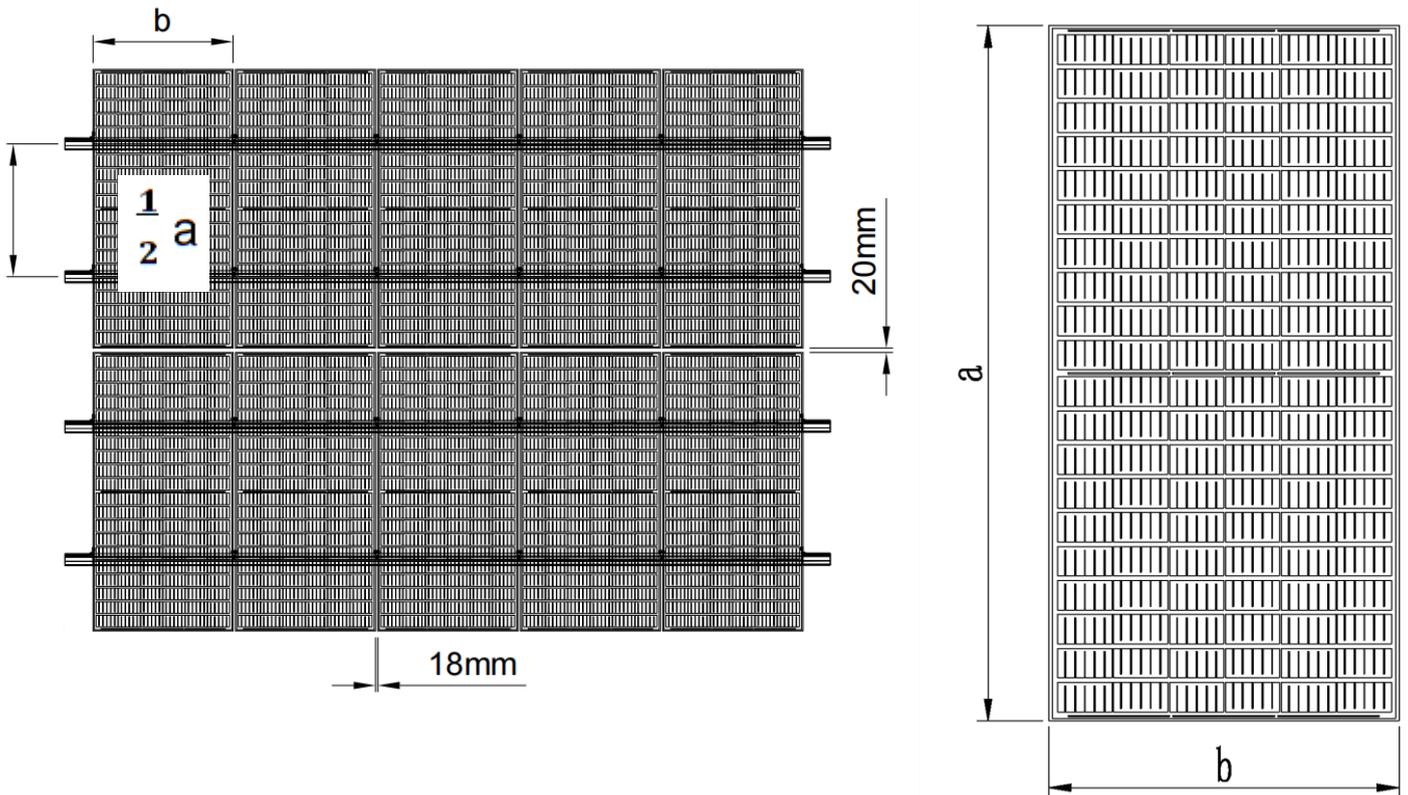


Step.4 Install back inclined support G (Recommended torque value: 25-28N.m)

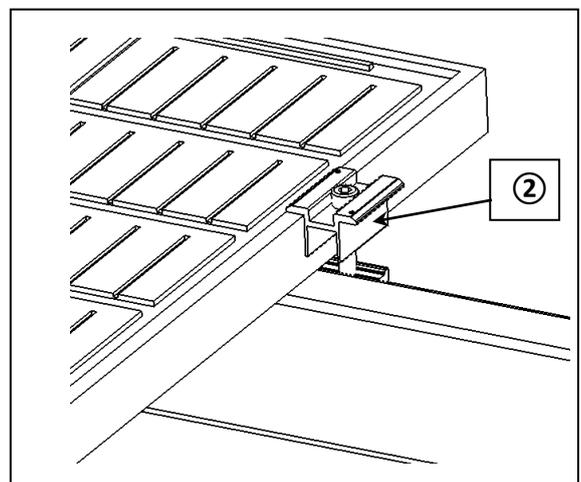
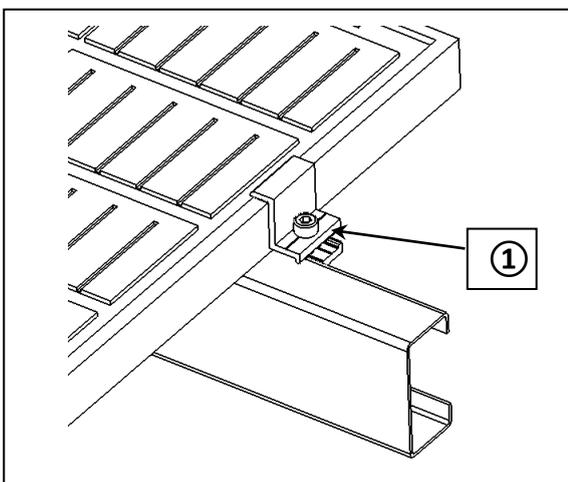
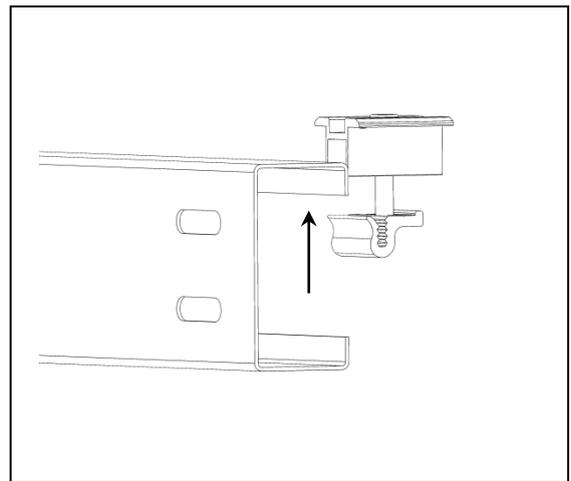
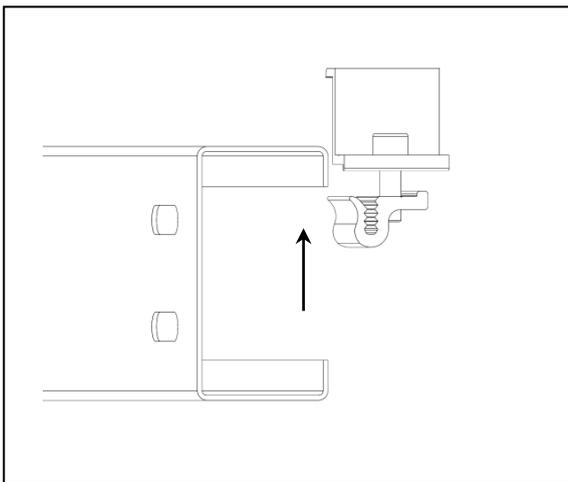
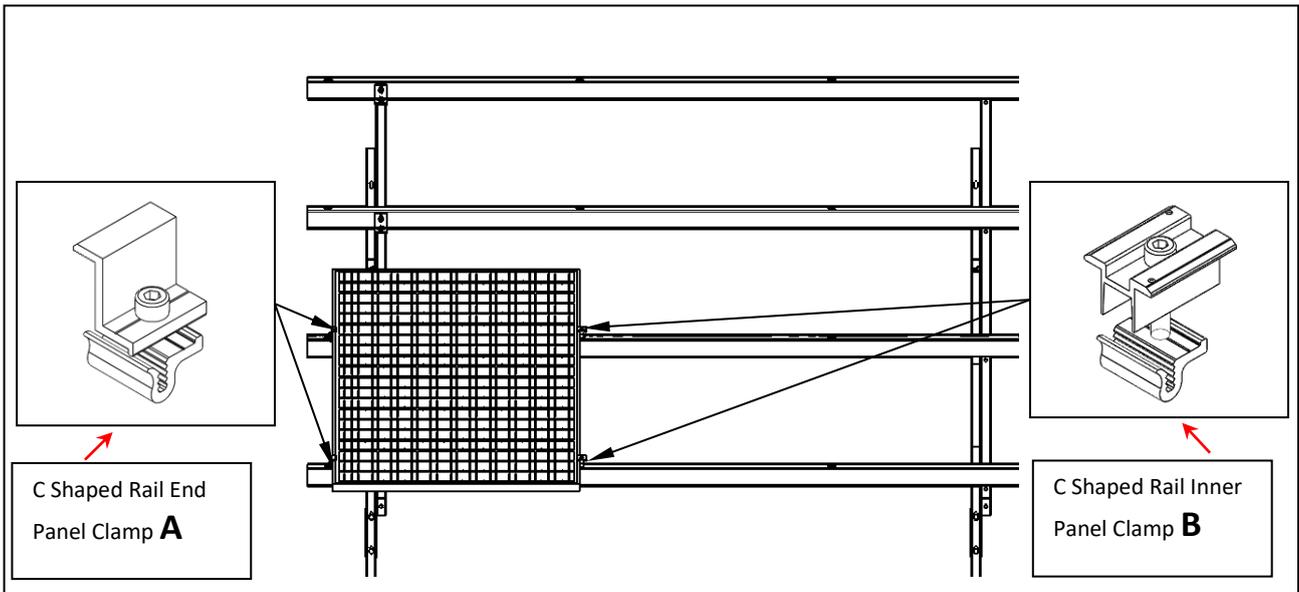
(Note: This step is the optional installation, please refer to the drawing)



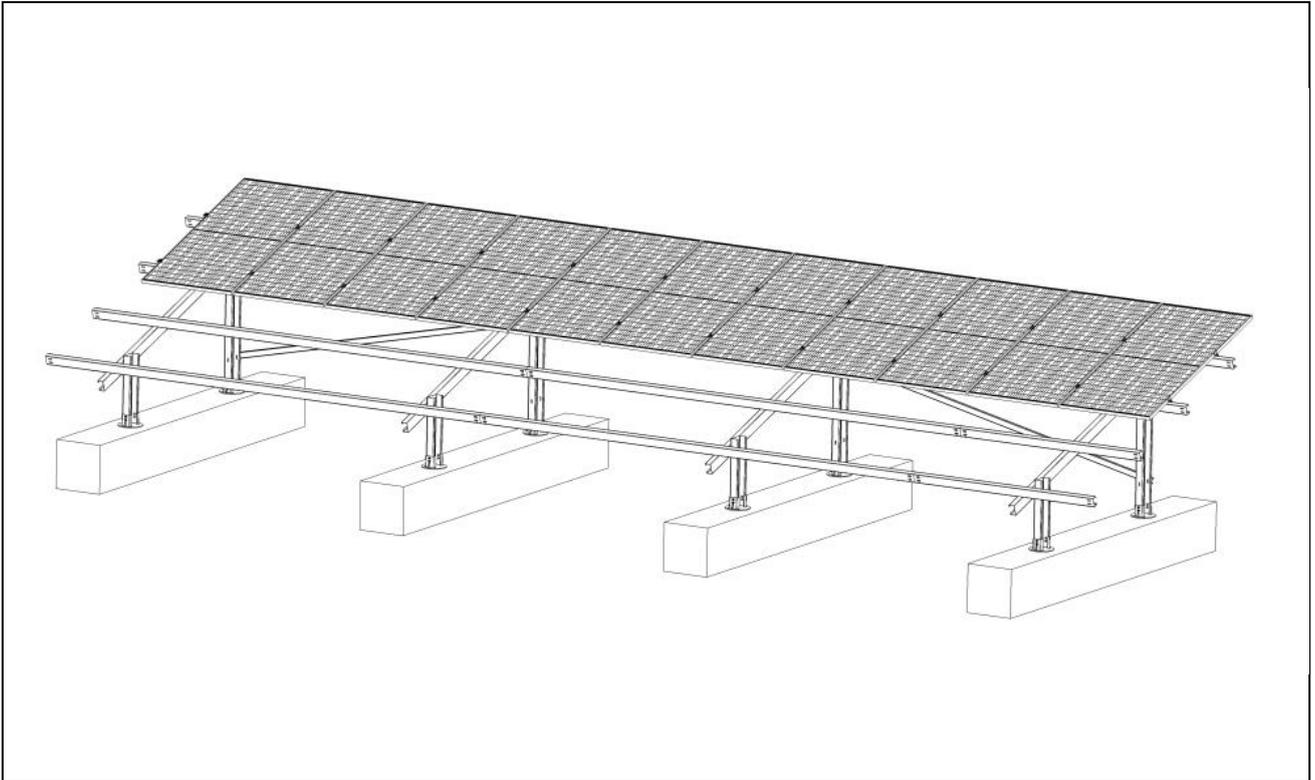
Step.5 Install solar panel.



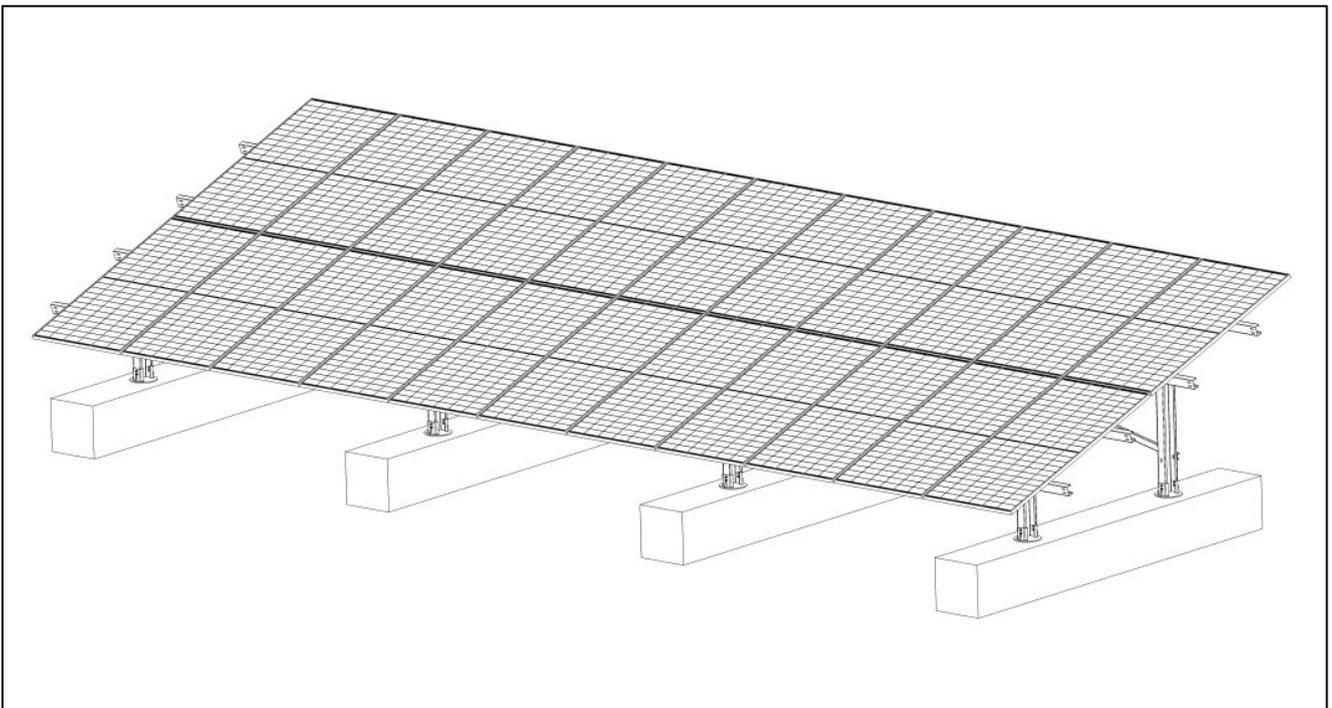
When installing the first panel, adjust the position of the solar panel according to the technical drawings, fix the panel on the cross beam by panel clamps.



- Attention:**
- 1.The panel clamps shall close against the solar panel.**
 - 2.Tighten the bolt slowly, until the clamp is in holding position.**
 - 3.Then use 12-14N.M torque to tighten the bolt.**

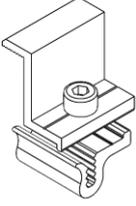
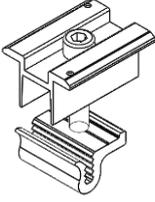
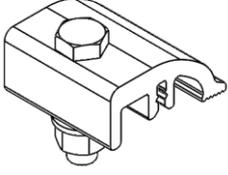
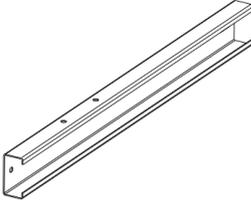
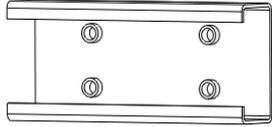
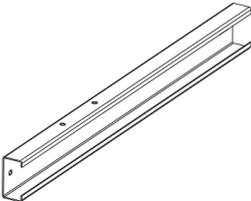
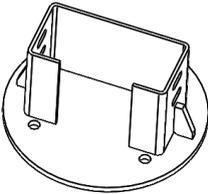


© Install panels by row(vertical direction), and make 20mm gaps between each row.



© Solar panel installation completed. Double check and ensure all bolts be tighten

COMPONENTS

Part Name	C Shaped Rail End Panel Clamp	C Shaped Rail Inner Panel Clamp	C Shaped Rail Clamp
Article #			
Figure			
Part Name	C shaped Rafter (95×50×15×1.8)	C shaped Rail (110×60×20×2)	C shaped Rail Connector
Article #			
Figure			
Part Name	C shaped support (170×80×25×2.5)	C shaped back inclined support (100×50×20×1.5)	Foundation connector
Article #			
Figure			



Regina Wautersweg 13, 8800 Roeselare
Belgium

+32 (0)51 14 05 94
hello@novamounting.com
www.novamounting.com